

ds

Set	Items	Description
S1	132	IL(W)21
S2	73	RD S1 (unique items)
S3	1	S2 AND IL(W)TIF
S4	10	S2 AND STAT
S5	10	RD S4 (unique items)
S6	3	S2 AND ACUTE(W) PHASE

LIGHT set on as ' '
? begin 5,73,155,399
14sep03 09:34:08 User208760 Session D2367.2
\$0.00 0.070 DialUnits File410
\$0.00 Estimated cost File410
\$0.01 TELNET
\$0.01 Estimated cost this search
\$0.30 Estimated total session cost 0.154 DialUnits

SYSTEM:OS - DIALOG OneSearch
File 5:Biosis Previews(R) 1969-2003/Sep W1
(c) 2003 BIOSIS
File 73:EMBASE 1974-2003/Sep W1
(c) 2003 Elsevier Science B.V.
File 155:MEDLINE(R) 1966-2003/Sep W2
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changed. Please see HELP NEWS 155.
File 399:CA SEARCH(R) 1967-2003/UD=13911
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Set Items Description

? s il(w)21
343515 IL
989060 21
S1 132 IL(W)21
? rd s1
...examined 50 records (50)
...examined 50 records (100)
...completed examining records
S2 73 RD S1 (unique items)
? s s2 and il(w)tif
73 S2
343515 IL
1514 TIF
34 IL(W)TIF
S3 1 S2 AND IL(W)TIF
? t s3/7/all

3/7/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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12687035 BIOSIS NO.: 200000440537
Human interleukin-10-related T cell-derived inducible factor: Molecular
cloning and functional characterization as an hepatocyte-stimulating
factor.
AUTHOR: Dumoutier Laure; Van Roost Emiel; Colau Didier; Renauld
Jean-Christophe(a)
AUTHOR ADDRESS: (a)Brussels Branch and Experimental Medicine Unit, Ludwig
Institute for Cancer Research, Christian de Duve Institute of Cellular
Pathology, Universite Catholique de Louvain, Avenue Hippocrate 74, B1200,
Brussels**Belgium
JOURNAL: Proceedings of the National Academy of Sciences of the United
States of America 97 (18):p10144-10149 August 29, 2000
MEDIUM: print
ISSN: 0027-8424
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: IL-10-related T cell-derived inducible factor (IL-TIF or IL-21) is a new cytokine structurally related to IL-10 and originally identified in the mouse as a gene induced by IL-9 in T cells and mast cells. Here, we report the cloning of the human IL-TIF cDNA, which shares 79% amino acid identity with mouse IL-TIF and 25% identity with human IL-10. Recombinant human IL-TIF was found to activate signal transducer and activator of transcription factors-1 and -3 in several hepatoma cell lines. IL-TIF stimulation of HepG2 human hepatoma cells up-regulated the production of acute phase reactants such as serum amyloid A, alpha1-antichymotrypsin, and haptoglobin. Although IL-10 and IL-TIF have distinct activities, antibodies directed against the beta chain of the IL-10 receptor blocked the induction of acute phase reactants by IL-TIF, indicating that this chain is a common component of the IL-10 and IL-TIF receptors. Similar acute phase reactant induction was observed in mouse liver upon IL-TIF injection, and IL-TIF expression was found to be rapidly increased after lipopolysaccharide (LPS) injection, suggesting that this cytokine contributes to the inflammatory response in vivo.

? t s2/3/all

2/3/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14414946 BIOSIS NO.: 200300408975
Cytokine requirements for the growth and development of mouse NK cells in vitro.
AUTHOR: Toomey Jennifer A; Gays Frances; Foster Don; Brooks Colin G(a)
AUTHOR ADDRESS: (a)School of Cell and Molecular Biosciences, Medical School, Newcastle, NE2 4HH, UK**UK E-Mail: colin.brooks@newcastle.ac.uk
JOURNAL: Journal of Leukocyte Biology 74 (2):p233-242 August 2003 2003
MEDIUM: print
ISSN: 0741-5400
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14403529 BIOSIS NO.: 200300397558
IL-21 activates both innate and adaptive immunity to generate potent antitumor responses that require perforin but are independent of IFN-gamma.
AUTHOR: Ma Hak-Ling; Whitters Matthew J; Konz Richard F; Senices Mayra; Young Deborah A; Grusby Michael J; Collins Mary; Dunussi-Joannopoulos Kyriaki(a)
AUTHOR ADDRESS: (a)Wyeth Research, 200 Cambridge Park Drive, Cambridge, MA, 02140, USA**USA E-Mail: kDunussi@wyeth.com
JOURNAL: Journal of Immunology 171 (2):p608-615 July 15 2003 2003
MEDIUM: print
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14399801 BIOSIS NO.: 200300393830

Characterization and analysis of the proximal Janus kinase 3 promoter.

AUTHOR: Aringer Martin; Hofmann Sigrun R; Frucht David M; Chen Min; Centola Michael; Morinobu Akio; Visconti Roberta; Kastner Daniel L; Smolen Josef S; O'Shea John J(a)

AUTHOR ADDRESS: (a)Molecular Immunology and Inflammation Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, 10 Center Drive, Building 10, Room 9N252, MSC-1820, Bethesda, MD, 20892-1820, USA**USA E-Mail: osheajo@mail.nih.gov

JOURNAL: Journal of Immunology 170 (12):p6057-6064 June 15 2003 2003

MEDIUM: print

ISSN: 0022-1767

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

2/3/4 (Item 4 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

14362653 BIOSIS NO.: 200300356682

Anti-Tumor Effects of Interleukin 21.

AUTHOR: Nelson Andrew(a); Hughes Steven D(a); Holly Rick(a); Heipel Mark(a); Johnson Becky(a); Bannink Ken(a); Holdren Matt(a); Shiota Faith(a); Yen Cindy(a); Kindsvogel Wayne(a); Clegg Chris(a); Foster Don(a)

AUTHOR ADDRESS: (a)Cytokine and Receptor Biology, Zymogenetics, Seattle, WA, USA**USA

JOURNAL: Blood 100 (11):pAbstract No 593 November 16 2002 2002

MEDIUM: print

CONFERENCE/MEETING: 44th Annual Meeting of the American Society of Hematology Philadelphia, PA, USA December 06-10, 2002

SPONSOR: American Society of Hematology

ISSN: 0006-4971

RECORD TYPE: Abstract

LANGUAGE: English

2/3/5 (Item 5 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

14362324 BIOSIS NO.: 200300356353

Gene Therapy in Canine X-Linked Severe Combined Immunodeficiency by RD114 Pseudotyped Oncoretroviral Vector.

AUTHOR: Ting Suk See(a); Hartnett Brian J(a); Linton Gilda F(a); Malech Harry L(a); Felsburg Peter J(a)

AUTHOR ADDRESS: (a)Department of Host Defense, National Institutes of Health, Bethesda, MD, USA**USA

JOURNAL: Blood 100 (11):pAbstract No 427 November 16 2002 2002

MEDIUM: print

CONFERENCE/MEETING: 44th Annual Meeting of the American Society of Hematology Philadelphia, PA, USA December 06-10, 2002

SPONSOR: American Society of Hematology

ISSN: 0006-4971

RECORD TYPE: Abstract

LANGUAGE: English

2/3/6 (Item 6 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

14347123 BIOSIS NO.: 200300341152

IL-21 in synergy with IL-15 or IL-18 enhances IFN-gamma
production in human NK and T cells.

AUTHOR: Strengell Mari(a); Matikainen Sampsa; Siren Jukka; Lehtonen Anne;
Foster Don; Julkunen Ilkka; Sareneva Timo

AUTHOR ADDRESS: (a)Department of Microbiology, National Public Health
Institute, Mannerheimintie 166, FIN-00300, Helsinki, Finland**Finland

E-Mail: mari.strengell@ktl.fi

JOURNAL: Journal of Immunology 170 (11):p5464-5469 June 1 2003 2003

MEDIUM: print

ISSN: 0022-1767

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

2/3/7 (Item 7 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

14342275 BIOSIS NO.: 200300336304

Different Repopulation Patterns in Nonconditioned Versus Myeloablated
X-SCID Mice Following Common gamma Chain Gene Transfer.

AUTHOR: Kume Akihiro(a); Hanazono Yutaka(a); Mizukami Hiroaki(a); Okada
Takashi(a); Sugamura Kazuo(a); Ozawa Keiya(a)

AUTHOR ADDRESS: (a)Genetic Therapeutics, Jichi Medical School,
Minamikawachi, Tochigi, Japan**Japan

JOURNAL: Blood 100 (11):pAbstract No 1704 November 16 2002 2002

MEDIUM: print

CONFERENCE/MEETING: 44th Annual Meeting of the American Society of
Hematology Philadelphia, PA, USA December 06-10, 2002

SPONSOR: American Society of Hematology

ISSN: 0006-4971

RECORD TYPE: Abstract

LANGUAGE: English

2/3/8 (Item 8 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

14251292 BIOSIS NO.: 200300245321

IL-21 induces the apoptosis of resting and activated primary B
cells.

AUTHOR: Mehta Devangi S; Wurster Andrea L; Whitters Matthew J; Young
Deborah A; Collins Mary; Grusby Michael J(a)

AUTHOR ADDRESS: (a)Department of Immunology and Infectious Diseases,
Harvard School of Public Health, 651 Huntington Avenue, Boston, MA,
02115, USA**USA E-Mail: mgrusby@hsph.harvard.edu

JOURNAL: Journal of Immunology 170 (8):p4111-4118 April 15 2003 2003

MEDIUM: print

ISSN: 0022-1767

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

2/3/9 (Item 9 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

14220658 BIOSIS NO.: 200300214687

Expression of the interleukin-21 gene in murine colon carcinoma cells
generates systemic immunity in the inoculated hosts.

AUTHOR: Ugai Shin-ichi; Shimozato Osamu; Kawamura Kiyoko; Wang Yan-Qing;
Yamaguchi Taketo; Saisho Hiromitsu; Sakiyama Shigeru; Tagawa Masatoshi(a)
AUTHOR ADDRESS: (a)Division of Pathology, Chiba Cancer Center Research
Institute, 666-2 Nitona, Chuo-ku, Chiba, 260-8717, Japan**Japan E-Mail:
mtagawa@chiba-cc.pref.chiba.jp
JOURNAL: Cancer Gene Therapy 10 (3):p187-192 March 2003 2003
MEDIUM: print
ISSN: 0929-1903
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/10 (Item 10 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14175762 BIOSIS NO.: 200300169791
Analysis of gammac-family cytokine target genes. Identification of
dual-specificity phosphatase 5 (DUSP5) as a regulator of
mitogen-activated protein kinase activity in interleukin-2 signaling.
AUTHOR: Kovanen Panu E; Rosenwald Andreas; Fu Jacqueline; Hurt Elaine M;
Lam Lloyd T; Giltnane Jena M; Wright George; Staudt Louis M; Leonard
Warren J(a)
AUTHOR ADDRESS: (a)Laboratory of Molecular Immunology, NHLBI, National
Institutes of Health, Bethesda, MD, 20892, USA**USA E-Mail:
wjl@helix.nih.gov
JOURNAL: Journal of Biological Chemistry 278 (7):p5205-5213 February 14
2003 2003
MEDIUM: print
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/11 (Item 11 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14152535 BIOSIS NO.: 200300146564
Human IL-21 and IL-4 bind to partially overlapping epitopes of
common gamma-chain.
AUTHOR: Zhang Jin-Li(a); Foster Don; Sebald Walter
AUTHOR ADDRESS: (a)Biozentrum, Physiologische Chemie II,
Theodor-Boveri-Institut fuer Biowissenschaften, Universitaet Wuerzburg,
Am Hubland, D-97074, Wuerzburg, Germany**Germany E-Mail:
zhang@biozentrum.uni-wuerzburg.de
JOURNAL: Biochemical and Biophysical Research Communications 300 (2):p
291-296 January 10 2003 2003
MEDIUM: print
ISSN: 0006-291X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/12 (Item 12 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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14110491 BIOSIS NO.: 200300104520
Program death-1 engagement upon TCR activation has distinct effects on
costimulation and cytokine-driven proliferation: Attenuation of ICOS,

IL-4, and IL-21, but not CD28, IL-7, and IL-15 responses.
AUTHOR: Bennett Frann; Luxenberg Deborah; Ling Vincent; Wang I-Ming;
Marquette Kim; Lowe David; Khan Nighat; Veldman Geertruida; Jacobs
Kenneth A; Valge-Archer Viia E; Collins Mary; Carreno Beatriz M(a)
AUTHOR ADDRESS: (a)Wyeth Research, 200 Cambridge Park Drive, Cambridge, MA,
02140, USA**USA E-Mail: bcarreno@wyeth.com
JOURNAL: Journal of Immunology 170 (2):p711-718 January 15 2003 2003
MEDIUM: print
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/13 (Item 13 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14068748 BIOSIS NO.: 200300062777
Differentiation of human gammadelta T cells towards distinct memory
phenotypes.
AUTHOR: Eberl Matthias(a); Engel Rosel; Beck Ewald; Jomaa Hassan
AUTHOR ADDRESS: (a)Biochemisches Institut, Justus-Liebig-Universitaet
Giessen, Friedrichstr. 24, 35392, Giessen, Germany**Germany E-Mail:
matthias.eberl@biochemie.med.uni-giessen.de
JOURNAL: Cellular Immunology 218 (1-2):p1-6 July-August 2002 2002
MEDIUM: print
ISSN: 0008-8749
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/14 (Item 14 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14057920 BIOSIS NO.: 200300051949
Primary macrophages express IL-21R and respond to IL-21 by
proliferating and secreting increased levels of cytokines and chemokines.
AUTHOR: Witek JoAnn(a); Reppucci Betty(a); Whitters Matthew(a); Konz
Richard(a); Sibley Barbara(a); Calvetti James(a); Collins Mary(a); Young
Deborah(a)
AUTHOR ADDRESS: (a)Wyeth Research, Cambridge, MA, USA**USA
JOURNAL: Journal of Interferon and Cytokine Research 22 (Supplement 1):p
S-100 2002
MEDIUM: print
CONFERENCE/MEETING: Joint Meeting of the International Society for
Interferon and Cytokine Research, the International Cytokine Society, the
Society for Leukocyte Biology, and the European Cytokine Society on
Cytokines and Interferons Turin, Italy October 06-10, 2002
SPONSOR: International Society for Interferon and Cytokine Research
ISSN: 1079-9907
RECORD TYPE: Citation
LANGUAGE: English

2/3/15 (Item 15 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14057916 BIOSIS NO.: 200300051945
IL-21 up-regulates the expression of genes associated with
innate immunity and Th1 response.

AUTHOR: Strengell Mari(a); Sareneva Timo(a); Foster Don; Julkunen Ilkka(a);
Matikainen Sampsa(a)
AUTHOR ADDRESS: (a)Department of Microbiology, National Public Health
Institute, Helsinki, Finland**Finland
JOURNAL: Journal of Interferon and Cytokine Research 22 (Supplement 1):p
S-99 2002
MEDIUM: print
CONFERENCE/MEETING: Joint Meeting of the International Society for
Interferon and Cytokine Research, the International Cytokine Society, the
Society for Leukocyte Biology, and the European Cytokine Society on
Cytokines and Interferons Turin, Italy October 06-10, 2002
SPONSOR: International Society for Interferon and Cytokine Research
ISSN: 1079-9907
RECORD TYPE: Citation
LANGUAGE: English

2/3/16 (Item 16 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14057912 BIOSIS NO.: 200300051941
Role of IL-21 in the differentiation of human dendritic cells.
AUTHOR: Musso Tiziana(a); Ernst Martin; Budagian Vadim; Cappello Paola;
Giovarelli Mirella; Foster Don; Badolato Raffaele; Bulfone-Paus Silvia
AUTHOR ADDRESS: (a)Department of Public Health and Microbiology, University
of Turin, Turin, Italy**Italy
JOURNAL: Journal of Interferon and Cytokine Research 22 (Supplement 1):p
S-98 2002
MEDIUM: print
CONFERENCE/MEETING: Joint Meeting of the International Society for
Interferon and Cytokine Research, the International Cytokine Society, the
Society for Leukocyte Biology, and the European Cytokine Society on
Cytokines and Interferons Turin, Italy October 06-10, 2002
SPONSOR: International Society for Interferon and Cytokine Research
ISSN: 1079-9907
RECORD TYPE: Citation
LANGUAGE: English

2/3/17 (Item 17 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14057909 BIOSIS NO.: 200300051938
Expression of the novel cytokine IL-21 during acute rejection
after clinical heart transplantation and the effect of immunosuppressive
agents.
AUTHOR: de Groot-Kruseman H A(a); Balk A H M M(a); Klepper M(a); van Gelder
T(a); Niesters H G M(a); Weimar W(a); Baan C C(a)
AUTHOR ADDRESS: (a)Internal Medicine, Cardiology, and Diagnostic, Institute
of Molecular Biology, Erasmus MC, Rotterdam, Netherlands**Netherlands
JOURNAL: Journal of Interferon and Cytokine Research 22 (Supplement 1):p
S-97 2002
MEDIUM: print
CONFERENCE/MEETING: Joint Meeting of the International Society for
Interferon and Cytokine Research, the International Cytokine Society, the
Society for Leukocyte Biology, and the European Cytokine Society on
Cytokines and Interferons Turin, Italy October 06-10, 2002
SPONSOR: International Society for Interferon and Cytokine Research
ISSN: 1079-9907
RECORD TYPE: Citation
LANGUAGE: English

2/3/18 (Item 18 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14042443 BIOSIS NO.: 200300036472
Interleukin-21 and the IL-21 receptor: Novel effectors of NK
and T cell responses.
AUTHOR: Parrish-Novak Julia; Foster Donald C(a); Holly Richard D; Clegg
Christopher H
AUTHOR ADDRESS: (a)Department of Cytokine and Receptor Biology,
ZymoGenetics, Inc., 1201 Eastlake Ave. E., Seattle, WA, 98102, USA**USA
E-Mail: fosterd@zgi.com
JOURNAL: Journal of Leukocyte Biology 72 (5):p856-863 November 2002 2002
MEDIUM: print
ISSN: 0741-5400
DOCUMENT TYPE: Literature Review
RECORD TYPE: Abstract
LANGUAGE: English

2/3/19 (Item 19 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14039870 BIOSIS NO.: 200300033899
Proliferation requirements of cytomegalovirus-specific, effector-type human
CD8+ T cells.
AUTHOR: van Leeuwen Ester M; Gamadia Laila E; Baars Paul A; Remmerswaal
Ester B; ten Berge Ineke J; van Lier Rene A(a)
AUTHOR ADDRESS: (a)Laboratory for Experimental Immunology, Academic Medical
Center, Meibergdreef 9, L1-152, 1105 AZ, Amsterdam, Netherlands**
Netherlands E-Mail: r.vanlier@amc.uva.nl
JOURNAL: Journal of Immunology 169 (10):p5838-5843 November 15 2002 2002
MEDIUM: print
ISSN: 0022-1767
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/20 (Item 20 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

14034421 BIOSIS NO.: 200300028450
Interleukin 21 prevents antigen-induced IgE production by inhibiting germ
line Cepsilon transcription of IL-4-stimulated B cells.
AUTHOR: Suto Akira; Nakajima Hiroshi(a); Hirose Koichi; Suzuki Kotaro;
Kagami Shin-ichiro; Seto Yohei; Hoshimoto Aihiro; Saito Yasushi; Foster
Donald C; Iwamoto Itsuo
AUTHOR ADDRESS: (a)Department of Internal Medicine II, Chiba University
School of Medicine, 1-8-1 Inohana, Chiba City, Chiba, 260-8670, Japan**
Japan E-Mail: nakajimh@intmed02.m.chiba-u.ac.jp
JOURNAL: Blood 100 (13):p4565-4573 December 15 2002 2002
MEDIUM: print
ISSN: 0006-4971
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/21 (Item 21 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

14028647 BIOSIS NO.: 200300022676

On CD28/CD40 ligand costimulation, common gamma-chain signals, and the alloimmune response.

AUTHOR: Demirci Gulcin; Gao Wenda; Zheng Xin Xiao; Malek Thomas R; Strom Terry B; Li Xian Chang(a)

AUTHOR ADDRESS: (a)Department of Medicine, Division of Immunology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, 02215, USA**USA E-Mail: xli@caregroup.harvard.edu

JOURNAL: Journal of Immunology 168 (9):p4382-4390 May 1 2002 2002

MEDIUM: print

ISSN: 0022-1767

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

2/3/22 (Item 22 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

14006286 BIOSIS NO.: 200300000315

A critical role for IL-21 in regulating immunoglobulin production.

AUTHOR: Ozaki Katsutoshi; Spolski Rosanne; Feng Carl G; Qi Chen-Feng; Cheng Jun; Sher Alan; Morse Herbert C III; Liu Chengyu; Schwartzberg Pamela L; Leonard Warren J(a)

AUTHOR ADDRESS: (a)Laboratory of Molecular Immunology, National Human Genome Research Institute, National Institutes of Health, Building 49, Room 4A38, Bethesda, MD, 20892-1674, USA**USA E-Mail: wjl@helix.nih.gov

JOURNAL: Science (Washington D C) 298 (5598):p1630-1634 22 November 2002 2002

MEDIUM: print

ISSN: 0036-8075

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

2/3/23 (Item 23 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

13976572 BIOSIS NO.: 200200605393

An immune reactive subform of chronic allograft nephropathy is indicated by Th1 and CTL effector gene activation but not histology.

AUTHOR: Strehlau Juergen(a); Henne Thomas(a); Ma Naili; Lars Pape(a); Latta Kay(a); Ehrich Jochen H H(a); Offner Gisela(a)

AUTHOR ADDRESS: (a)Dept. Pediatric Nephrology, Hannover Medical School, Hannover**Germany

JOURNAL: Journal of the American Society of Nephrology 13 (Program and Abstracts Issue):p559A September, 2002

MEDIUM: print

CONFERENCE/MEETING: Meeting of the American Society of Nephrology Philadelphia, PA, USA October 30-November 04, 2002

SPONSOR: American Society of Nephrology

ISSN: 1046-6673

RECORD TYPE: Citation

LANGUAGE: English

2/3/24 (Item 24 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

13935667 BIOSIS NO.: 200200564488

Interleukin 21 is a T helper (Th) cell 2 cytokine that specifically inhibits the differentiation of naive Th cells into interferon gamma-producing Th1 cells.

AUTHOR: Wurster Andrea L; Rodgers Vikki L; Satoskar Abhay R; Whitters Matthew J; Young Deborah A; Collins Mary; Grusby Michael J(a)

AUTHOR ADDRESS: (a)Dept. of Immunology and Infectious Diseases, 651 Huntington Ave, Boston, MA, 02115**USA E-Mail: mgrusby@hspb.harvard.edu

JOURNAL: Journal of Experimental Medicine 196 (7):p969-977 October 7, 2002

MEDIUM: print

ISSN: 0022-1007

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

2/3/25 (Item 25 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

13912469 BIOSIS NO.: 200200541290

Antitumor activity of interleukin-21 prepared by novel refolding procedure from inclusion bodies expressed in Escherichia coli.

AUTHOR: Asano Ryutarou; Kudoa Toshio(a); Makabe Koki; Tsumoto Kouhei; Kumagai Izumi

AUTHOR ADDRESS: (a)Cell Resource Center for Biomedical Research, Institute of Development, Aging, and Cancer, Tohoku University, 4-1 Seiryomachi, Aoba-ku, Sendai, 980-8575**Japan E-Mail: j23700@gen.cc.tohoku.ac.jp, kmiz@mail.cc.tohoku.ac.jp

JOURNAL: FEBS Letters 528 (1-3):p70-76 25 September, 2002

MEDIUM: print

ISSN: 0014-5793

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

2/3/26 (Item 26 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

13808092 BIOSIS NO.: 200200436913

The common gamma chain (gammac) is a required signaling component of the IL-21 receptor and supports IL-21-induced cell proliferation via JAK3.

AUTHOR: Habib Tania; Senadheera Shantha; Weinberg Kenneth; Kaushansky Kenneth(a)

AUTHOR ADDRESS: (a)Department of Medicine, UCSD Medical School, 402 Dickenson St., Suite 380, San Diego, CA, 92103-8811**USA E-Mail: kkaushansky@ucsd.edu

JOURNAL: Biochemistry 41 (27):p8725-8731 July 9, 2002

MEDIUM: print

ISSN: 0006-2960

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

2/3/27 (Item 27 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

13789405 BIOSIS NO.: 200200418226
Generation of antagonists by amino acid replacement in the D-helix of human
IL-21.

AUTHOR: Brandt Cameron(a); Birks Carl(a); Chan Chung(a); Liu Hong(a);
Ostrander Craig(a); Pownder Tracey(a); McKernan Pat(a); Foster Don(a);
West Jim(a)

AUTHOR ADDRESS: (a)ZymoGenetics, Inc., 1201 Eastlake Ave. E., Seattle, WA,
98102**USA

JOURNAL: Journal of Leukocyte Biology Supplement (2001):p46 2001

MEDIUM: print

CONFERENCE/MEETING: Joint Meeting of the Society for Leukocyte Biology and
the International Cytokine Society: The Cytokine Odyssey 2001 Maui, HI,
USA November 08-11, 2001

SPONSOR: Society for Leukocyte Biology

RECORD TYPE: Citation

LANGUAGE: English

2/3/28 (Item 28 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13789363 BIOSIS NO.: 200200418184
IL21 blocks IL15-induced NK cell expansion and enhances IFNgamma
production.

AUTHOR: Kasaian Marion(a); Whitters Matthew(a); Johnson Kaley(a); Konz
Richard(a); Deng Bijia(a); Carter Laura(a); Collins Mary(a); Young
Deborah(a)

AUTHOR ADDRESS: (a)Genetics Institute/Wyeth Research, Cambridge, MA**USA

JOURNAL: Journal of Leukocyte Biology Supplement (2001):p36 2001

MEDIUM: print

CONFERENCE/MEETING: Joint Meeting of the Society for Leukocyte Biology and
the International Cytokine Society: The Cytokine Odyssey 2001 Maui, HI,
USA November 08-11, 2001

SPONSOR: Society for Leukocyte Biology

RECORD TYPE: Citation

LANGUAGE: English

2/3/29 (Item 29 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13789323 BIOSIS NO.: 200200418144
Effects of IL-21 on murine T cells.

AUTHOR: Carter Laura L(a); Jussif Jason(a); Lowe Leslie(a); Johnson Kaley
(a); Whitters Matthew(a); Kasaian Marion(a); Collins Mary(a); Young
Deborah(a); Carreno Beatriz M(a)

AUTHOR ADDRESS: (a)Genetics Institute/Wyeth Research, Cambridge, MA**USA

JOURNAL: Journal of Leukocyte Biology Supplement (2001):p27 2001

MEDIUM: print

CONFERENCE/MEETING: Joint Meeting of the Society for Leukocyte Biology and
the International Cytokine Society: The Cytokine Odyssey 2001 Maui, HI,
USA November 08-11, 2001

SPONSOR: Society for Leukocyte Biology

RECORD TYPE: Citation

LANGUAGE: English

2/3/30 (Item 30 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13765035 BIOSIS NO.: 200200393856

Don't count your interleukins before they've hatched.

AUTHOR: Eberl Matthias(a)

AUTHOR ADDRESS: (a)Biochemisches Institut, Justus-Liebig-Universitaet
Giessen, Friedrichstrasse 24, 35392, Giessen**Germany E-Mail:
matthias.eberl@biochemie.med.uni-giessen.de

JOURNAL: Trends in Immunology 23 (7):p341-342 July, 2002

MEDIUM: print

ISSN: 1471-4906

DOCUMENT TYPE: Letter

RECORD TYPE: Citation

LANGUAGE: English

2/3/31 (Item 31 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

13762414 BIOSIS NO.: 200200391235

Accumulation of a potent gammadelta T-cell stimulator after deletion of the
lytB gene in Escherichia coli.

AUTHOR: Eberl Matthias(a); Altincicek Boran; Kollas Ann-Kristin;
Sanderbrand Silke; Bahr Ute; Reichenberg Armin; Beck Ewald; Foster Donald
; Wiesner Jochen; Hintz Martin; Jomaa Hassan

AUTHOR ADDRESS: (a)Biochemisches Institut, Klinikum der
Justus-Liebig-Universitaet Giessen, Friedrichstrasse 24, D-35392, Giessen
**Germany E-Mail: matthias.eberl@biochemie.med.uni-giessen.de

JOURNAL: Immunology 106 (2):p200-211 June, 2002

MEDIUM: print

ISSN: 0019-2805

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

2/3/32 (Item 32 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

13724408 BIOSIS NO.: 200200353229

Intragraft mRNA expression of the novel cytokine IL-21 during
acute rejection after clinical heart transplantation.

AUTHOR: de Groot-Kruseman H A(a); Klepper M(a); Mol W M(a); Niesters H G M;
van Gelder T(a); Maat A P W M; Balk A; Weimar W(a); Baan C(a)

AUTHOR ADDRESS: (a)Internal Medicine, University Hospital Rotterdam,
Rotterdam**Netherlands

JOURNAL: Journal of Heart and Lung Transplantation 21 (1):p165 January,
2002

MEDIUM: print

CONFERENCE/MEETING: Twenty-Second Annual Meeting and Scientific Sessions of
the International Society for Heart and Lung Transplantation Washington,
DC, USA April 10-13, 2002

SPONSOR: International Society for Heart and Lung Transplantation

ISSN: 1053-2498

RECORD TYPE: Citation

LANGUAGE: English

2/3/33 (Item 33 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

13681603 BIOSIS NO.: 200200310424

Interleukin-21 is a growth and survival factor for human myeloma cells.

AUTHOR: Brenne Anne-Tove; Ro Torstein Baade(a); Waage Anders; Sundan Anders

; Borset Magne; Hjorth-Hansen Henrik
AUTHOR ADDRESS: (a)Dept of Cancer Research and Molecular Biology, Norwegian
University of Science and Technology, MTFs, N-7489, Trondheim**Norway
E-Mail: torstein.ro@medisin.ntnu.no
JOURNAL: Blood 99 (10):p3756-3762 May 15, 2002
MEDIUM: print
ISSN: 0006-4971
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/34 (Item 34 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13653670 BIOSIS NO.: 200200282491
Structural basis for binding multiple ligands by the common cytokine
receptor gamma-chain.
AUTHOR: Olosz Ferenc; Malek Thomas R(a)
AUTHOR ADDRESS: (a)Dept. of Microbiology and Immunology, University of
Miami School of Medicine, R138, Miami, FL, 33101**USA E-Mail:
tmalek@med.miami.edu
JOURNAL: Journal of Biological Chemistry 277 (14):p12047-12052 April 5,
2002
MEDIUM: print
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/35 (Item 35 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13645198 BIOSIS NO.: 200200274019
IL-21 limits NK cell responses and promotes antigen-specific T
cell activation: A mediator of the transition from innate to adaptive
immunity.
AUTHOR: Kasaian Marion T; Whitters Matthew J; Carter Laura L; Lowe Leslie D
; Jussif Jason M; Deng Bijia; Johnson Kaley A; Witek JoAnn S; Senices
Mayra; Konz Richard F; Wurster Andrea L; Donaldson Debra D; Collins Mary;
Young Deborah A(a); Grusby Michael J
AUTHOR ADDRESS: (a)Genetics Institute, Wyeth Research, Cambridge, MA, 02140
**USA E-Mail: dyoung@wyeth.com
JOURNAL: Immunity 16 (4):p559-569 April, 2002
MEDIUM: print
ISSN: 1074-7613
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/36 (Item 36 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13632713 BIOSIS NO.: 200200261534
The interleukin-2 (IL-2) receptor common gamma chain (gammac) is a required
signaling component of the IL-21 receptor and supports
IL-21-induced cell proliferation via JAK3.
AUTHOR: Habib Tania J(a); Weinberg Kenneth I; Kaushansky Kenneth(a)
AUTHOR ADDRESS: (a)University of Washington, Seattle, WA**USA

JOURNAL: Blood 98 (11 Part 1):p818a November 16, 2001
MEDIUM: print
CONFERENCE/MEETING: 43rd Annual Meeting of the American Society of Hematology, Part 1 Orlando, Florida, USA December 07-11, 2001
ISSN: 0006-4971
RECORD TYPE: Abstract
LANGUAGE: English

2/3/37 (Item 37 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13632529 BIOSIS NO.: 200200261350
Interleukin-21 is a growth and survival factor for human myeloma cells.
AUTHOR: Ro Torstein B(a); Brenne Anne-Tove(a); Waage Anders; Sundan Anders (a); Borset Magne(a); Hjorth-Hansen Henrik(a)
AUTHOR ADDRESS: (a)Inst of Cancer Research and Molecular Biology, Norwegian University of Science and Technology, Trondheim**Norway
JOURNAL: Blood 98 (11 Part 1):p773a November 16, 2001
MEDIUM: print
CONFERENCE/MEETING: 43rd Annual Meeting of the American Society of Hematology, Part 1 Orlando, Florida, USA December 07-11, 2001
ISSN: 0006-4971
RECORD TYPE: Abstract
LANGUAGE: English

2/3/38 (Item 38 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13605543 BIOSIS NO.: 200200234364
IL-21 induces the release of sIL-2Ralpha from human peripheral blood mononuclear cells.
AUTHOR: Law J Y(a); Ozaki K(a); Qin H(a); Tian L(a); Stewart D M(a); Leonard W J(a); Nelson D L(a)
AUTHOR ADDRESS: (a)National Institutes of Health, Bethesda, MD**USA
JOURNAL: Journal of Investigative Medicine 50 (1):p73A January, 2002
MEDIUM: print
CONFERENCE/MEETING: Meeting of the American Federation for Medical Research, Western Region Carmel, California, USA February 06-09, 2002
ISSN: 1081-5589
RECORD TYPE: Citation
LANGUAGE: English

2/3/39 (Item 39 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13570224 BIOSIS NO.: 200200199045
The gene for interleukin-21 receptor is the partner of BCL6 in t(3;16)(q27;p11), which is recurrently observed in diffuse large B-cell lymphoma.
AUTHOR: Ueda Chiyoko(a); Akasaka Takashi(a); Ohno Hitoshi(a); Uchiyama Takashi(a)
AUTHOR ADDRESS: (a)First Division, Department of Internal Medicine, Kyoto University, Kyoto**Japan
JOURNAL: Blood 98 (11 Part 1):p560a November 16, 2001
MEDIUM: print
CONFERENCE/MEETING: 43rd Annual Meeting of the American Society of Hematology, Part 1 Orlando, Florida, USA December 07-11, 2001
ISSN: 0006-4971

RECORD TYPE: Abstract
LANGUAGE: English

2/3/40 (Item 40 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13104372 BIOSIS NO.: 200100311521
Interleukin-21 (IL-21) and IL-2 differentially activate STAT3
and STAT5 in BaF3 and CTLL cells.
AUTHOR: Habib Tania(a); Kaushansky Kenneth(a)
AUTHOR ADDRESS: (a)Hematology, University of Washington, Seattle, WA**USA
JOURNAL: Blood 96 (11 Part 1):p237a November 16, 2000
MEDIUM: print
CONFERENCE/MEETING: 42nd Annual Meeting of the American Society of
Hematology San Francisco, California, USA December 01-05, 2000
SPONSOR: American Society of Hematology
ISSN: 0006-4971
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

2/3/41 (Item 41 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

12992906 BIOSIS NO.: 200100200055
Cytokines: IL-21 joins the gammac-dependent network?
AUTHOR: Vosschenrich Christian A J(a); Di Santo James P
AUTHOR ADDRESS: (a)Unite des Cytokines et Developpement Lymphoide, Institut
Pasteur, 25 Rue du Dr Roux, 75742, Paris: vosschenr@pasteur.fr**France
JOURNAL: Current Biology 11 (5):pR175-R177 6 March, 2001
MEDIUM: print
ISSN: 0960-9822
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

2/3/42 (Item 42 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

12687035 BIOSIS NO.: 200000440537
Human interleukin-10-related T cell-derived inducible factor: Molecular
cloning and functional characterization as an hepatocyte-stimulating
factor.
AUTHOR: Dumoutier Laure; Van Roost Emiel; Colau Didier; Renauld
Jean-Christophe(a)
AUTHOR ADDRESS: (a)Brussels Branch and Experimental Medicine Unit, Ludwig
Institute for Cancer Research, Christian de Duve Institute of Cellular
Pathology, Universite Catholique de Louvain, Avenue Hippocrate 74, B1200,
Brussels**Belgium
JOURNAL: Proceedings of the National Academy of Sciences of the United
States of America 97 (18):p10144-10149 August 29, 2000
MEDIUM: print
ISSN: 0027-8424
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

2/3/43 (Item 43 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

11478406 BIOSIS NO.: 199800259738
The observation on treatment effects of local adoptive immunotherapy in 33 cases with head and neck cancer.
AUTHOR: Han Demin; Zhu Xiaonong; Huang Zhigang; et al
AUTHOR ADDRESS: Beijing Inst. Otolaryngol., Beijing 100005**China
JOURNAL: Zhonghua Zhongliu Zazhi 19 (6):p454-456 Nov., 1997
ISSN: 0253-3758
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: Chinese; Non-English
SUMMARY LANGUAGE: Chinese; English

2/3/44 (Item 44 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

10148722 BIOSIS NO.: 199698603640
Spontaneous and glucocorticoid-induced apoptosis in human mature T lymphocytes.
AUTHOR: Burnett Mauro(a); Martelli Nicola; Colasante Antonella; Piantelli Mauro; Musiani Piero; Aiello Francesca B
AUTHOR ADDRESS: (a)Lab. Immunopathol., Consorzio Mario Negri Sud, 66030 Santa Maria Imbaro**Italy
JOURNAL: Blood 86 (11):p4199-4205 1995
ISSN: 0006-4971
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/45 (Item 45 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

10062218 BIOSIS NO.: 199598517136
T-cell suppression and selective in vivo activation of TH2 subpopulation by the Entamoeba histolytica 220-kilodalton lectin.
AUTHOR: Talamas-Rohana Patricia(a); Schlie-Guzman Maria Adelina; Hernandez-Ramirez Veronica I; Rosales-Encina Jose Luis
AUTHOR ADDRESS: (a)Dep. Patologia Experimental, Centro Investigacion Estudios Avanzados IPN, Apdo. Postal 14-740, M**Mexico
JOURNAL: Infection and Immunity 63 (10):p3953-3958 1995
ISSN: 0019-9567
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/46 (Item 46 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

08740460 BIOSIS NO.: 199395029811
Effects of lipopolysaccharide on interleukin-2-induced cytotoxic activity of murine splenocyte cultures: Role of prostaglandin E-2 and interferons.
AUTHOR: Vaillier Dominique(a); Daculsi Richard; Gualde Norbert
AUTHOR ADDRESS: (a)URA 1456 CNRS, Univ. de Bordeaux, 146 rue Leo-Saignat,

33076 Bordeaux Cedex**France
JOURNAL: Cancer Immunology Immunotherapy 35 (6):p395-400 1992
ISSN: 0340-7004
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

2/3/47 (Item 47 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

08355994 BIOSIS NO.: 000094096517
RENAL TUBULAR EPITHELIAL ANTIGEN-CONTAINING IMMUNE COMPLEXES STIMULATE
INTERLEUKIN-1 PRODUCTION BY MONOCYTES FROM PATIENTS WITH
GLOMERULONEPHRITIS
AUTHOR: MATSUMOTO K
AUTHOR ADDRESS: SECOND DEP. INTERNAL MED., NIHON UNIV. SCH. MED., TOKYO,
JPN.
JOURNAL: INT UROL NEPHROL 24 (3). 1992. 319-326. 1992
FULL JOURNAL NAME: International Urology and Nephrology
CODEN: IURNA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

2/3/48 (Item 48 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

07845233 BIOSIS NO.: 000092115399
INTRAVENOUS VITAMINS FOR VERY-LOW-BIRTH-WEIGHT INFANTS
AUTHOR: GREENE H L; SMITH R; POLLACK P; MURRELL J; CAUDILL M; SWIFT L
AUTHOR ADDRESS: VANDERBILT UNIV. MED. CENT., DEP. PEDIATRICS, DIV.
NUTRITION, D-4130 MEDICAL CENT. NORTH, NASHVILLE, TENN. 37232-2576.
JOURNAL: J AM COLL NUTR 10 (4). 1991. 281-288. 1991
FULL JOURNAL NAME: Journal of the American College of Nutrition
CODEN: JONUD
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

2/3/49 (Item 49 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

07751133 BIOSIS NO.: 000092064854
DISSOCIATION BETWEEN EARLY AND LATE EVENTS IN T CELL ACTIVATION MEDIATED
THROUGH CD28 SURFACE MOLECULE
AUTHOR: NUNES J; BAGNASCO M; LOPEZ M; LIPCEY C; MAWAS C; OLIVE D
AUTHOR ADDRESS: UNITE CANCEROL. ET THERAPEUTIQUE EXP., U.119, INSERM, 27
BLVD. LEI ROURE, 13009 MARSEILLE, FRANCE.
JOURNAL: MOL IMMUNOL 28 (4-5). 1991. 427-436. 1991
FULL JOURNAL NAME: Molecular Immunology
CODEN: MOIMD
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

2/3/50 (Item 50 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

07343136 BIOSIS NO.: 000090123038

ELEVATION OF CYCLIC AMP LEVELS INDEPENDENTLY DOWN REGULATES IL-1 IL-2 AND
IL-2 RECEPTOR CD25 SYNTHESIS
AUTHOR: IWAZ J; KOUASSI E; LAFONT S; REVILLARD J P
AUTHOR ADDRESS: LAB. IMMUNOL., INSERM U.80, CNRS UA 1177, UCBL, HOP. E.
HERRIOT, 69437 LYON CEDEX 03, FRANCE.
JOURNAL: INT J IMMUNOPHARMACOL 12 (6). 1990. 631-638. 1990
FULL JOURNAL NAME: International Journal of Immunopharmacology
CODEN: IJIMD
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

2/3/51 (Item 51 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

07236207 BIOSIS NO.: 000090016081
NUCLEAR EVENTS AFTER ACTIVATION OF CD4-POSITIVE-8-POSITIVE THYMOCYTES
AUTHOR: RIEGEL J S; RICHIE E R; ALLISON J P
AUTHOR ADDRESS: DEP. MICROBIOL. IMMUNOL., UNIV. CALIFORNIA BERKELEY,
BERKELEY, CALIF. 94720.
JOURNAL: J IMMUNOL 144 (9). 1990. 3611-3618. 1990
FULL JOURNAL NAME: Journal of Immunology
CODEN: JOIMA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

2/3/52 (Item 52 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

04596611 BIOSIS NO.: 000079009648
MEAT PRODUCTION AND CARCASS INDICATORS OF INTENSIVELY FATTENED LAMBS OF
SOME BREEDS RAISED IN SOUTH BULGARIA 2
AUTHOR: IVANOV I S; DIMITROV I
AUTHOR ADDRESS: INST. CATTLE SHEEP BREED., STARA ZAGORA, BULG.
JOURNAL: ZHIVOTNOV'D NAUKI 21 (1). 1984. 35-41. 1984
FULL JOURNAL NAME: Zhivotnov'Dni Nauki
CODEN: ZHVNA
RECORD TYPE: Abstract
LANGUAGE: BULGARIAN

2/3/53 (Item 53 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

03524616 BIOSIS NO.: 000073027696
EFFECTS OF NITRATE LEVEL ON NITROGEN METABOLISM IN WINGED BEAN
PSOPHOCARPUS-TETRAGONOLOBUS AND SOYBEAN GLYCINE-MAX
AUTHOR: HILDEBRAND D F; HARPER J E; HYMOWITZ T
AUTHOR ADDRESS: DEP. AGRONOMY, UNIV. ILLINOIS, URBANA, ILL. 61801.
JOURNAL: ANN BOT (LOND) 48 (3). 1981. 307-314. 1981
FULL JOURNAL NAME: Annals of Botany (London)
CODEN: ANBOA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

2/3/54 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2003 Elsevier Science B.V. All rts. reserv.

12224288 EMBASE No: 2003334945

Thymopoiesis and T cell development in common gamma chain-deficient dogs
Felsburg P.J.; Hartnett B.J.; Gouthro T.A.; Henthorn P.S.
P.J. Felsburg, School of Veterinary Medicine, University of Pennsylvania,
3900 Delancey St., Philadelphia, PA 19104 United States

AUTHOR EMAIL: felsburg@mail.vet.upenn.edu

Immunologic Research (IMMUNOL. RES.) (United States) 2003, 27/2-3
(235-245)

CODEN: IMRSE ISSN: 0257-277X

DOCUMENT TYPE: Journal ; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 35

2/3/55 (Item 2 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

12165793 EMBASE No: 2003269914

Analysis of gammaSUBc-family cytokine target genes: Identification of
dual-specificity phosphatase 5 (DUSP5) as a regulator of mitogen-activated
protein kinase activity in interleukin-2 signaling

Kovanen P.E.; Rosenwald A.; Fu J.; Hurt E.M.; Lam L.T.; Giltane J.M.;
Wright G.; Staudt L.M.; Leonard W.J.

W.J. Leonard, Laboratory of Molecular Immunology, NHLBI, National
Institutes of Health, Bethesda, MD 20892 United States

AUTHOR EMAIL: wjl@helix.nih.gov

Journal of Biological Chemistry (J. BIOL. CHEM.) (United States) 14
FEB 2003, 278/7 (5205-5213)

CODEN: JBCHA ISSN: 0021-9258

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 54

2/3/56 (Item 3 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

11852506 EMBASE No: 2002405520

Proliferation requirements of cytomegalovirus-specific, effector-type
human CD8SUP+ T cells

Van Leeuwen E.M.; Gamadia L.E.; Baars P.A.; Remmerswaal E.B.; Ten Berge
I.J.; Van Lier R.A.

Dr. R.A. Van Lier, Lab. for Experimental Immunology, Academic Medical
Center, Meibergdreef 9, 1105 AZ Amsterdam Netherlands

AUTHOR EMAIL: r.vanlier@amc.uva.nl

Journal of Immunology (J. IMMUNOL.) (United States) 15 NOV 2002,
169/10 (5838-5843)

CODEN: JOIMA ISSN: 0022-1767

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 27

2/3/57 (Item 4 from file: 73)

DIALOG(R)File 73:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

11665428 EMBASE No: 2002237530

Novel interleukins - IL-19, IL-20, IL-21, IL-22, IL-23

Kasakura S.

Dr. S. Kasakura, Kobe City General Hospital, 6-4 Minatojima-Nakamachi,
Chuo-ku, Kobe 650-0046 Japan

Biotherapy (BIOTHERAPY (JAPAN)) (Japan) 2002, 16/3 (193-203)
CODEN: BITPE ISSN: 0914-2223
DOCUMENT TYPE: Journal ; Review
LANGUAGE: JAPANESE SUMMARY LANGUAGE: ENGLISH; JAPANESE
NUMBER OF REFERENCES: 32

2/3/58 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2003 Elsevier Science B.V. All rts. reserv.

11604173 EMBASE No: 2002176788
Transplantation of X-linked severe combined immunodeficient dogs with
CD34SUP+ bone marrow cells
Hartnett B.J.; Yao D.P.; Suter S.E.; Ellinwood N.M.; Henthorn P.S.; Moore
P.F.; McSweeney P.A.; Nash R.A.; Brown J.D.; Weinberg K.I.; Felsburg P.J.
Dr. P.J. Felsburg, School of Veterinary Medicine, University of
Pennsylvania, Department of Clinical Studies, 3850 Spruce St.,
Philadelphia, PA 19104 United States
AUTHOR EMAIL: felsburg@vet.upenn.edu
Biology of Blood and Marrow Transplantation (BIOL. BLOOD MARROW
TRANSPLANT.) (United States) 2002, 8/4 (188-197)
CODEN: BBMTF ISSN: 1083-8791
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 66

2/3/59 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2003 Elsevier Science B.V. All rts. reserv.

11214897 EMBASE No: 2001221711
Cutting edge: The common gamma-chain is an indispensable subunit of the
IL-21 receptor complex
Asao H.; Okuyama C.; Kumaki S.; Ishii N.; Tsuchiya S.; Foster D.;
Sugamura K.
Dr. H. Asao, Department of Microbiology, Tohoku Univ. Graduate Sch. of
Med., 2-1 Seiryomachi, Aoba-ku, Sendai 980-8575 Japan
AUTHOR EMAIL: asao-h@mail.cc.tohoku.ac.jp
Journal of Immunology (J. IMMUNOL.) (United States) 01 JUL 2001,
167/1 (1-5)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 29

2/3/60 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

15315347 22832261 PMID: 12950770
IL-21 Cutting and funneling: novel pathways in melanoma
invasion and migration.
Friedl P
University of Wurzburg, Department of Dermatology, Cell Migration
Laboratory, Wurzburg, Germany.
Pigment cell research / sponsored by the European Society for Pigment
Cell Research and the International Pigment Cell Society (Denmark) Oct
2003, 16 (5) p581, ISSN 0893-5785 Journal Code: 8800247
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM

Record type: In Process

2/3/61 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

14782911 22464407 PMID: 12435740
Analysis of gamma c-family cytokine target genes. Identification of dual-specificity phosphatase 5 (DUSP5) as a regulator of mitogen-activated protein kinase activity in interleukin-2 signaling.
Kovanen Panu E; Rosenwald Andreas; Fu Jacqueline; Hurt Elaine M; Lam Lloyd T; Giltneane Jena M; Wright George; Staudt Louis M; Leonard Warren J
Laboratory of Molecular Immunology, NHLBI, National Institutes of Health, Maryland 20892, USA.
Journal of biological chemistry (United States) 11 14 2002, 278 (7) p5205-13, ISSN 0021-9258 Journal Code: 2985121R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

2/3/62 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

14718967 22523232 PMID: 12635355
[New inflammation modulator interleukins . Therapeutic implications]
Noi interleukine modulatoroare ale inflamatiei. Implicatii terapeutice.
Lupusoru Catalina Elena; Tartau Liliana; Ghiciuc Cristina
Diciplina de Farmacologie-Toxicologie-Algeziologie, Facultatea de Medicina, Universitatea de Medicina si Farmacie Gr.T. Popa Iasi.
Revista medico-chirurgicala a Societatii de Medici si Naturalisti din Iasi (Romania) Jan-Mar 2002, 106 (1) p24-9, ISSN 0300-8738
Journal Code: 0413735
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

2/3/63 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

14378106 22340745 PMID: 12393685
Interleukin 21 prevents antigen-induced IgE production by inhibiting germ line C(epsilon) transcription of IL-4-stimulated B cells.
Suto Akira; Nakajima Hiroshi; Hirose Koichi; Suzuki Kotaro; Kagami Shin-ichiro; Seto Yohei; Hoshimoto Aihiro; Saito Yasushi; Foster Donald C; Iwamoto Itsuo; et al
Department of Internal Medicine II, Chiba University School of Medicine, Chiba City, Japan.
Blood (United States) 08 01 2002, 100 (13) p4565-73, ISSN 0006-4971
Journal Code: 7603509
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

2/3/64 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

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13888764 22008966 PMID: 12014808

Transplantation of X-linked severe combined immunodeficient dogs with CD34+ bone marrow cells.

Hartnett Brian J; Yao DaPeng; Suter Steven E; Ellinwood N Matthew; Henthorn Paula S; Moore Peter E; McSweeney Peter A; Nash Richard A; Brown Jeffrey D; Weinberg Kenneth I; Felsburg Peter J; et al

Department of Clinical Studies, School of Veterinary Medicine, University of Pennsylvania, Philadelphia 19104, USA.

Biology of blood and marrow transplantation - journal of the American Society for Blood and Marrow Transplantation (United States) 2002, 8

(4) p188-97, ISSN 1083-8791 Journal Code: 9600628

Contract/Grant No.: P01-RR12211; RR; NCRR; R01-AI43745; AI; NIAID; R01-HL52971; HL; NHLBI; RR07063; RR; NCRR; +

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

2/3/65 (Item 6 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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10119313 22088156 PMID: 12093291

The common gamma chain (gamma c) is a required signaling component of the IL-21 receptor and supports IL-21 -induced cell proliferation via JAK3.

Habib Tania; Senadheera Shantha; Weinberg Kenneth; Kaushansky Kenneth
Division of Hematology, University of Washington School of Medicine, Seattle, Washington 98195, USA.

Biochemistry (United States) Jul 9 2002, 41 (27) p8725-31, ISSN 0006-2960 Journal Code: 0370623

Contract/Grant No.: P50 HL54850; HL; NHLBI; R01 AI40581; AI; NIAID; R01 AI43745; AI; NIAID; R01 CA31615; CA; NCI; R01 DK49855; DK; NIDDK

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

2/3/66 (Item 7 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

09402875 21169212 PMID: 11267886

Cytokines: IL-21 joins the gamma(c)-dependent network?

Vosshenrich C A; Di Santo J P

Unite des Cytokines et Developpement Lymphoide, Institut Pasteur, 25 rue du Dr Roux, 75742, Paris, France. vosshenr@pasteur.fr

Current biology - CB (England) Mar 6 2001, 11 (5) pR175-7, ISSN 0960-9822 Journal Code: 9107782

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

2/3/67 (Item 8 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

01181170 72026870 PMID: 5000317

[Notes on the round table discussion of the clinical studies of penthrane held at Santa Vittoria d'Alba on 21 June 1970 by the Associazione Anestesisti Rianimatori Ospedalieri Piemontesi]

Atti della tavola rotonda su aggiornamenti clinici sul pentrane svoltasi a Santa Vittoria d'Alba il 21 giugno 1970 a cura dell'Associazione Anestesisti Rianimatori Ospedalieri Piemontesi.

Minerva anesthesiologica (ITALY) Jun-Jul 1971, 37 (6) p257-88, ISSN 0375-9393 Journal Code: 0375272

Document type: Journal Article

Languages: ITALIAN

Main Citation Owner: NLM

Record type: Completed

2/3/68 (Item 9 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

00207354 67160619 PMID: 5229075

[Report on the activity of the Study Center during the academic year 1964-65 compiled on Oct. 21, 1965]

Relazione sull'attivit  del Centro Studi durante l'anno accademico 1964-65 esposta il 21-10-1965.

Palazzi S

Rassegna trimestrale di odontoiatria (ITALY) Jul-Sep 1966, 47 (3) p259-76, ISSN 0033-9911 Journal Code: 20020625R

Document type: Journal Article

Languages: ITALIAN

Main Citation Owner: NLM

Record type: Completed

2/3/69 (Item 1 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 2003 American Chemical Society. All rts. reserv.

139035100 CA: 139(3)35100y PATENT

Methods and compositions for modulating interleukin-21 (IL-21) or IL-21 receptor (IL-21R) activity and therapeutic uses

INVENTOR(AUTHOR): Carter, Laura; Carreno, Beatriz; Lowe, Leslie D.; Whitters, Matthew J.; Dunussi, Kyri; Collins, Mary; Ma, Margery; Young, Deborah A.; Witek, Joann S.; Larsen, Glenn; Kasaian, Marion T.; Donaldson, Debra D.; Unger, Michelle

LOCATION: USA

ASSIGNEE: Wyeth, John, and Brother Ltd.

PATENT: U.S. Pat. Appl. Publ. ; US 20030108549 A1 DATE: 20030612

APPLICATION: US 264634 (20021004) *US 40005' (19980317) *US 560766 (20000428) *US 569384 (20000511) *US 972218 (20011004) *US PV373746 (20020417)

PAGES: 109 pp., Cont.-in-part of U.S. Ser. No. 972,218. CODEN: USXXCO

LANGUAGE: English CLASS: 424145100; A61K-039/395A; A61K-031/525B; A61K-031/4745B; A61K-031/415B

2/3/70 (Item 2 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 2003 American Chemical Society. All rts. reserv.

138380415 CA: 138(25)380415a PATENT

Protein and cDNA sequences of mutant interleukin-21 proteins and use as IL-21 antagonists

INVENTOR(AUTHOR): Presnell, Scott R.; West, James W.; Novak, Julia E.

LOCATION: USA

ASSIGNEE: Zymogenetics, Inc.

PATENT: PCT International ; WO 200340313 A2 DATE: 20030515
APPLICATION: WO 2002US34502 (20021028) *US PV337586 (20011105)
PAGES: 71 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-000/A
DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;
CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;
GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;
LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE;
SG; SI; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; UZ; VC; VN; YU; ZA; ZM; ZW;
AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW
; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; SK; TR; BF; BJ; CF; CG; CI; CM;
GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

2/3/71 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.

136182464 CA: 136(12)182464m PATENT
Anti-IL-12 antibodies for diagnosing and treating psoriasis and multiple
sclerosisAnti-IL-12 antibodies for diagnosing and treating psoriasis and
multiple sclerosis
INVENTOR(AUTHOR): Giles-Komar, Jill; Knight, David M.; Peritt, David;
Scallan, Bernard; Shealy, David
LOCATION: USA
ASSIGNEE: Centocor, Inc.
PATENT: PCT International ; WO 200212500 A2 DATE: 20020214
APPLICATION: WO 2001US24720 (20010807) *US PV223358 (20000807) *US
PV236827 (20000929) *US 920262 (20010801)
PAGES: 96 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/13A;
C07K-016/24B; C12N-015/79B; C12N-005/10B; A61K-039/395B; C07K-016/42B;
A61P-037/00B; G01N-033/50B; G01N-033/577B DESIGNATED COUNTRIES: AE; AG; AL
; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE;
DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP;
KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX;
MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA;
UG; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM
DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AT;
BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF;
BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

2/3/72 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.

136166068 CA: 136(11)166068e PATENT
Human T cell inducible factors, interleukin-21, sequences, chromosomal
mapping, and function studies
INVENTOR(AUTHOR): Dumoutier, Laure; Renauld, Jean-Christophe
LOCATION: USA
ASSIGNEE: Ludwig Institute for Cancer Research
PATENT: PCT International ; WO 200210393 A2 DATE: 20020207
APPLICATION: WO 2001US20485 (20010627) *US 626617 (20000727)
PAGES: 64 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/24A;
C12N-015/63B; C07K-014/54B; G01N-033/50B DESIGNATED COUNTRIES: AU; BR; CA;
CN; JP DESIGNATED REGIONAL: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE
; IT; LU; MC; NL; PT; SE; TR

2/3/73 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.

134026112 CA: 134(3)26112y PATENT
 Cloning, sequence, and immunomodulatory use of human interleukin-10
 homologs, IL-D110 and IL-210
 INVENTOR(AUTHOR): Parham, Christi L.; De Waal, Malefyt Rene; Marehalli,
 Nagalakshmi L.
 LOCATION: USA
 ASSIGNEE: Schering-Corporation
 PATENT: PCT International ; WO 200073457 A1 DATE: 20001207
 APPLICATION: WO 2000US14729 (20000526) *US 322806 (19990527)
 PAGES: 62 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/19A;
 C12N-015/24B; C07K-014/52B; C07K-014/54B; C12Q-001/68B; C07K-016/24B;
 G01N-033/68B; A61K-038/19B; A61K-038/20B; A61K-039/395B
 DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA;
 CH; CN; CR; CZ; DE; DK; DM; DZ; EE; ES; FI; GB; GD; GE; HR; HU; ID; IL; IN;
 IS; JP; KG; KR; KZ; LC; LK; LR; LT; LU; LV; MA; MD; MG; MK; MN; MX; NO; NZ;
 PL; PT; RO; RU; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UZ; VN; YU; ZA;
 AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW
 ; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR;
 IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE;
 SN; TD; TG
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 73 S2
 19776 STAT
 S4 10 S2 AND STAT
 ? rd s4
 ...completed examining records
 S5 10 RD S4 (unique items)
 ? t s5/7/all
 5/7/1 (Item 1 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
 (c) 2003 BIOSIS. All rts. reserv.

14399801 BIOSIS NO.: 200300393830
 Characterization and analysis of the proximal Janus kinase 3 promoter.
 AUTHOR: Aringer Martin; Hofmann Sigrun R; Frucht David M; Chen Min; Centola
 Michael; Morinobu Akio; Visconti Roberta; Kastner Daniel L; Smolen Josef
 S; O'Shea John J(a)
 AUTHOR ADDRESS: (a)Molecular Immunology and Inflammation Branch, National
 Institute of Arthritis and Musculoskeletal and Skin Diseases, National
 Institutes of Health, 10 Center Drive, Building 10, Room 9N252, MSC-1820,
 Bethesda, MD, 20892-1820, USA**USA E-Mail: osheajo@mail.nih.gov
 JOURNAL: Journal of Immunology 170 (12):p6057-6064 June 15 2003 2003
 MEDIUM: print
 ISSN: 0022-1767
 DOCUMENT TYPE: Article
 RECORD TYPE: Abstract
 LANGUAGE: English

ABSTRACT: Janus kinase 3 (Jak3) is a nonreceptor tyrosine kinase essential
 for signaling via cytokine receptors that comprise the common gamma-chain
 (gammac), i.e., the receptors for IL-2, IL-4, IL-7, IL-9, IL-15, and
 IL-21. Jak3 is preferentially expressed in hemopoietic cells
 and is up-regulated upon cell differentiation and activation. Despite the
 importance of Jak3 in lymphoid development and immune function, the
 mechanisms that govern its expression have not been defined. To gain
 insight into this issue, we set out to characterize the Jak3 promoter.
 The 5'-untranslated region of the Jak3 gene is interrupted by a 3515-bp
 intron. Upstream of this intron and the transcription initiation site, we
 identified an approx1-kb segment that exhibited lymphoid-specific promoter
 activity and was responsive to TCR signals. Truncation of this fragment
 revealed that core promoter activity resided in a 267-bp fragment that
 contains putative Sp-1, AP-1, Ets, Stat, and other binding sites.
 Mutation of the AP-1 sites significantly diminished, whereas mutation of

the Ets sites abolished, the inducibility of the promoter construct. Chromatin immunoprecipitation assays showed that histone acetylation correlates with mRNA expression and that Ets-1/2 binds this region. Thus, transcription factors that bind these sites, especially Ets family members, are likely to be important regulators of Jak3 expression.

5/7/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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14175762 BIOSIS NO.: 200300169791

Analysis of gammac-family cytokine target genes. Identification of dual-specificity phosphatase 5 (DUSP5) as a regulator of mitogen-activated protein kinase activity in interleukin-2 signaling.
AUTHOR: Kovanen Panu E; Rosenwald Andreas; Fu Jacqueline; Hurt Elaine M; Lam Lloyd T; Giltane Jena M; Wright George; Staudt Louis M; Leonard Warren J(a)
AUTHOR ADDRESS: (a)Laboratory of Molecular Immunology, NHLBI, National Institutes of Health, Bethesda, MD, 20892, USA**USA E-Mail: wjl@helix.nih.gov

JOURNAL: Journal of Biological Chemistry 278 (7):p5205-5213 February 14 2003 2003

MEDIUM: print

ISSN: 0021-9258

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Interleukin (IL)-2, IL-4, IL-7, IL-9, IL-15, and IL-21 form a family of cytokines based on their sharing the common cytokine receptor gamma chain, gammac, which is mutated in X-linked severe combined immunodeficiency (SCID). As a step toward further elucidating the mechanism of action of these cytokines in T-cell biology, we compared the gene expression profiles of IL-2, IL-4, IL-7, and IL-15 in T cells using cDNA microarrays. IL-2, IL-7, and IL-15 each induced a highly similar set of genes, whereas IL-4 induced distinct genes correlating with differential **STAT** protein activation by this cytokine. One gene induced by IL-2, IL-7, and IL-15 but not IL-4 was dual-specificity phosphatase 5 (DUSP5). In IL-2-dependent CTLL-2 cells, we show that IL-2-induced ERK-1/2 activity was inhibited by wild type DUSP5 but markedly increased by an inactive form of DUSP5, suggesting a negative feedback role for DUSP5 in IL-2 signaling. Our findings provide insights into the shared versus distinctive actions by different members of the gammac family of cytokines. Moreover, we have identified a DUSP5-dependent negative regulatory pathway for MAPK activity in T cells.

5/7/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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13935667 BIOSIS NO.: 200200564488

Interleukin 21 is a T helper (Th) cell 2 cytokine that specifically inhibits the differentiation of naive Th cells into interferon gamma-producing Th1 cells.

AUTHOR: Wurster Andrea L; Rodgers Vikki L; Satoskar Abhay R; Whitters Matthew J; Young Deborah A; Collins Mary; Grusby Michael J(a)

AUTHOR ADDRESS: (a)Dept. of Immunology and Infectious Diseases, 651 Huntington Ave, Boston, MA, 02115**USA E-Mail: mgrusby@hsph.harvard.edu

JOURNAL: Journal of Experimental Medicine 196 (7):p969-977 October 7, 2002

MEDIUM: print

ISSN: 0022-1007

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The cytokine potential of developing T helper (Th) cells is directly shaped both positively and negatively by the cytokines expressed by the effector Th cell subsets. Here we find that the recently identified cytokine, interleukin (IL)-21, is preferentially expressed by Th2 cells when compared with Th1 cells generated in vitro and in vivo. Exposure of naive Th precursors to IL-21 inhibits interferon (IFN)-gamma production from developing Th1 cells. The repression of IFN-gamma production is specific in that the expression of other Th1 and Th2 cytokines is unaffected IL-21 decreases the IL-12 responsiveness of developing Th cells by specifically reducing both signal transducer and activator of transcription 4 protein and mRNA expression. These results suggest that Th2 cell-derived IL-21 regulates the development of IFN-gamma-producing Th1 cells which could serve to amplify a Th2 response.

5/7/4 (Item 4 from file: 5)

DIALOG(R) File 5:Biosis Previews(R)

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13808092 BIOSIS NO.: 200200436913

The common gamma chain (gammac) is a required signaling component of the IL-21 receptor and supports IL-21-induced cell proliferation via JAK3.

AUTHOR: Habib Tania; Senadheera Shantha; Weinberg Kenneth; Kaushansky Kenneth(a)

AUTHOR ADDRESS: (a)Department of Medicine, UCSD Medical School, 402 Dickenson St., Suite 380, San Diego, CA, 92103-8811**USA E-Mail: kkaushansky@ucsd.edu

JOURNAL: Biochemistry 41 (27):p8725-8731 July 9, 2002

MEDIUM: print

ISSN: 0006-2960

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The common cytokine receptor gamma chain (gammac), an essential component of the receptors for IL-2, IL-4, IL-7, IL-9, and IL-15, is critical for the development and function of lymphocytes. Recently, a novel lymphokine (IL-21) and its receptor (IL-21Ralpha) were described which profoundly affect the growth and activation state of B, T, and NK cells in concert with other lymphokines or stimuli (Parrish-Novak, J., et al. (2000) Nature 408, 57-63). In this report, we show that gammac is also a required signaling component of the IL-21 receptor (IL-21R) using the gammac-deficient X-linked severe combined immunodeficiency (XSCID) lymphoblastoid cell line JT, and JT cells reconstituted with gammac (JT/gammac). Moreover, we demonstrate a functional requirement for both gammac and the gammac-associated Janus family tyrosine kinase 3 (JAK3) in IL-21-induced proliferation of pro-B-lymphoid cells engineered to express human IL-21Ralpha (BaF3/IL-21Ralpha). Retroviral-mediated transduction of wild-type gammac into XSCID JT cells restored function to the IL-21R, as shown by IL-21-induced tyrosine phosphorylation of JAK1 and JAK3, and downstream activation of STAT5, in JT/gammac cells as well as BaF3/IL-21Ralpha and primary splenic B cells. In contrast, IL-21 failed to activate the JAK-STAT pathway in nonreconstituted JT cells. Monoclonal antibodies specific for the gammac chain effectively inhibited IL-21-induced growth of BaF3/IL-21Ralpha cells, supporting a functional role for this molecule in the IL-21R complex. In addition, the specific JAK3 tyrosine kinase inhibitor WHI-P131 significantly reduced IL-21-induced

proliferation of BaF3/IL-21Ralpha cells. Taken together, these results definitively demonstrate that IL-21-mediated signaling requires the gamma chain, and indicate that JAK3 is an essential transducer of gamma-dependent survival and/or mitogenic signals induced by this cytokine.

5/7/5 (Item 5 from file: 5)
DIALOG(R) File 5: Biosis Previews(R)
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13104372 BIOSIS NO.: 200100311521
Interleukin-21 (IL-21) and IL-2 differentially activate STAT3 and STAT5 in BaF3 and CTLL cells.
AUTHOR: Habib Tania(a); Kaushansky Kenneth(a)
AUTHOR ADDRESS: (a) Hematology, University of Washington, Seattle, WA**USA
JOURNAL: Blood 96 (11 Part 1):p237a November 16, 2000
MEDIUM: print
CONFERENCE/MEETING: 42nd Annual Meeting of the American Society of Hematology San Francisco, California, USA December 01-05, 2000
SPONSOR: American Society of Hematology
ISSN: 0006-4971
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: Interleukin-21 (IL-21), a newly described cytokine expressed by stimulated T cells, regulates the growth and activation state of several types of lymphocytes including T-, B- and NK cells (Parrish-Novak et. al., Nature, in press). The biological effects of IL-21 are mediated through a class I cytokine receptor (IL-21R) that interacts with the common gamma (c) chain of the IL-2R, implying that IL-21 and IL-2 may activate common intracellular signaling pathways. However, in contrast to the marked proliferative actions of IL-2 on T cells, IL-21 acts both to modestly augment lymphocyte proliferation and as an important activation signal for mature NK cells. We therefore sought to compare the activities and early signaling events induced by human IL-21 and IL-2 in pro-B-lymphoid (BaF3/IL-21R/IL-2R) and cytotoxic T-lymphoid (CTLL2/IL-21R) cells engineered to express IL-21R. Using MTT proliferation assays, we found that IL-21 could support the growth of BaF3/IL-21R/IL-2R, whereas this cytokine had no effect on the proliferation of the more mature CTLL2/IL-21R cells despite up to 10-fold higher IL-21R expression levels in this cell line. To understand the molecular basis for these results, we compared the JAK and STAT proteins activated by IL-21 using several independent clones of each cell line. Using immunoprecipitation and Western blotting, we found that IL-2 and IL-21 induced identical patterns of Janus kinase (JAK) activation, leading to prominent tyrosine phosphorylation of JAK1 and JAK3 in both BaF3/IL-21R/IL-2R and CTLL2/IL-21R cells. However, the relative levels of STAT3 and STAT5 activation varied in both cell lines in response to the two cytokines. Stimulation of either CTLL2/IL-21R or BaF3/IL-21R/IL-2R with IL-2 resulted in prominent STAT5 and little or no STAT3 activation. In contrast, stimulation of the same cell lines with IL-21 induced prominent STAT3 and, to a lesser extent, STAT5 activation. Thus differential activation of individual STAT proteins may be an important mechanism by which signal specificity is elicited by IL-2 and IL-21. Moreover, this pattern of STAT protein activation may not serve as a proliferative signal in more mature lymphoid populations. Taken together, our results begin to provide insights into molecular mechanisms underlying the actions of this newly discovered cytokine.

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DIALOG(R)File 5:Biosis Previews(R)
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Human interleukin-10-related T cell-derived inducible factor: Molecular cloning and functional characterization as an hepatocyte-stimulating factor.

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ABSTRACT: IL-10-related T cell-derived inducible factor (IL-TIF or IL-21) is a new cytokine structurally related to IL-10 and originally identified in the mouse as a gene induced by IL-9 in T cells and mast cells. Here, we report the cloning of the human IL-TIF cDNA, which shares 79% amino acid identity with mouse IL-TIF and 25% identity with human IL-10. Recombinant human IL-TIF was found to activate signal transducer and activator of transcription factors-1 and -3 in several hepatoma cell lines. IL-TIF stimulation of HepG2 human hepatoma cells up-regulated the production of acute phase reactants such as serum amyloid A, alpha1-antichymotrypsin, and haptoglobin. Although IL-10 and IL-TIF have distinct activities, antibodies directed against the beta chain of the IL-10 receptor blocked the induction of acute phase reactants by IL-TIF, indicating that this chain is a common component of the IL-10 and IL-TIF receptors. Similar acute phase reactant induction was observed in mouse liver upon IL-TIF injection, and IL-TIF expression was found to be rapidly increased after lipopolysaccharide (LPS) injection, suggesting that this cytokine contributes to the inflammatory response in vivo.

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Analysis of gammaSUBc-family cytokine target genes: Identification of dual-specificity phosphatase 5 (DUSP5) as a regulator of mitogen-activated protein kinase activity in interleukin-2 signaling

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Interleukin (IL)-2, IL-4, IL-7, IL-9, IL-15, and IL-21 form a family of cytokines based on their sharing the common cytokine receptor

gamma chain, gammaSUBc, which is mutated in X-linked severe combined immunodeficiency (SCID). As a step toward further elucidating the mechanism of action of these cytokines in T-cell biology, we compared the gene expression profiles of IL-2, IL-4, IL-7, and IL-15 in T cells using cDNA microarrays. IL-2, IL-7, and IL-15 each induced a highly similar set of genes, whereas IL-4 induced distinct genes correlating with differential **STAT** protein activation by this cytokine. One gene induced by IL-2, IL-7, and IL-15 but not IL-4 was dual-specificity phosphatase 5 (DUSP5). In IL-2-dependent CTLL-2 cells, we show that IL-2-induced ERK-1/2 activity was inhibited by wild type DUSP5 but markedly increased by an inactive form of DUSP5, suggesting a negative feedback role for DUSP5 in IL-2 signaling. Our findings provide insights into the shared versus distinctive actions by different members of the gammaSUBc family of cytokines. Moreover, we have identified a DUSP5-dependent negative regulatory pathway for MAPK activity in T cells.

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14782911 22464407 PMID: 12435740

Analysis of gamma c-family cytokine target genes. Identification of dual-specificity phosphatase 5 (DUSP5) as a regulator of mitogen-activated protein kinase activity in interleukin-2 signaling.

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Interleukin (IL)-2, IL-4, IL-7, IL-9, IL-15, and IL-21 form a family of cytokines based on their sharing the common cytokine receptor gamma chain, gamma(c), which is mutated in X-linked severe combined immunodeficiency (SCID). As a step toward further elucidating the mechanism of action of these cytokines in T-cell biology, we compared the gene expression profiles of IL-2, IL-4, IL-7, and IL-15 in T cells using cDNA microarrays. IL-2, IL-7, and IL-15 each induced a highly similar set of genes, whereas IL-4 induced distinct genes correlating with differential **STAT** protein activation by this cytokine. One gene induced by IL-2, IL-7, and IL-15 but not IL-4 was dual-specificity phosphatase 5 (DUSP5). In IL-2-dependent CTLL-2 cells, we show that IL-2-induced ERK-1/2 activity was inhibited by wild type DUSP5 but markedly increased by an inactive form of DUSP5, suggesting a negative feedback role for DUSP5 in IL-2 signaling. Our findings provide insights into the shared versus distinctive actions by different members of the gamma(c) family of cytokines. Moreover, we have identified a DUSP5-dependent negative regulatory pathway for MAPK activity in T cells.

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The common gamma chain (gamma c) is a required signaling component of the IL-21 receptor and supports IL-21 -induced cell proliferation via JAK3.

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The common cytokine receptor gamma chain (gamma c), an essential component of the receptors for IL-2, IL-4, IL-7, IL-9, and IL-15, is critical for the development and function of lymphocytes. Recently, a novel lymphokine (IL-21) and its receptor (IL-21R alpha) were described which profoundly affect the growth and activation state of B, T, and NK cells in concert with other lymphokines or stimuli [Parrish-Novak, J., et al. (2000) Nature 408, 57-63]. In this report, we show that gamma c is also a required signaling component of the IL-21 receptor (IL-21R) using the gamma c-deficient X-linked severe combined immunodeficiency (XSCID) lymphoblastoid cell line JT, and JT cells reconstituted with gamma c (JT/gamma c). Moreover, we demonstrate a functional requirement for both gamma c and the gamma c-associated Janus family tyrosine kinase 3 (JAK3) in IL-21-induced proliferation of pro-B-lymphoid cells engineered to express human IL-21R alpha (BaF3/IL-21R alpha). Retroviral-mediated transduction of wild-type gamma c into XSCID JT cells restored function to the IL-21R, as shown by IL-21-induced tyrosine phosphorylation of JAK1 and JAK3, and downstream activation of STAT5, in JT/gamma c cells as well as BaF3/IL-21R alpha and primary splenic B cells. In contrast, IL-21 failed to activate the JAK-STAT pathway in nonreconstituted JT cells. Monoclonal antibodies specific for the gamma c chain effectively inhibited IL-21-induced growth of BaF3/IL-21R alpha cells, supporting a functional role for this molecule in the IL-21R complex. In addition, the specific JAK3 tyrosine kinase inhibitor WHI-P131 significantly reduced IL-21-induced proliferation of BaF3/IL-21R alpha cells. Taken together, these results definitively demonstrate that IL-21-mediated signaling requires the gamma c chain, and indicate that JAK3 is an essential transducer of gamma c-dependent survival and/or mitogenic signals induced by this cytokine.

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Human T cell inducible factors, interleukin-21, sequences, chromosomal mapping, and function studies

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LOCATION: USA

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PATENT: PCT International ; WO 200210393 A2 DATE: 20020207

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